

TMT142R

RTD thermometer, fieldtransmitter display

Safe monitoring of process temperatures in challenging applications e. g. in the Oil & Gas industry



More information and current pricing:

www.pt.endress.com/TMT142R

Benefits:

- HART® protocol for operating the device on site using handheld terminal (DXR375) or remotely via the PC
- Illuminated display, rotatable
- Single Pt100 with 3 or 4 wires connection
- Undervoltage detection responds immediately, output of falsified measured values is prevented
- Highly accurate in entire operating temperature range
- Approvals: ATEX (EEx i.a., EEx d and dust ignition-proof), CSA (IS, NI, XP and DIP)
- Output simulation

Specs at a glance

- **Accuracy** class A acc. to IEC 60751 class AA acc. to IEC 60751
- **Response time** depending on configuration $t_{50} = 3 \text{ s}$ $t_{90} = 7 \text{ s}$
- **Max. process pressure (static)** Depending on thermowell
- **Operating temperature range** PT 100: $-200 \text{ }^{\circ}\text{C} \dots 600 \text{ }^{\circ}\text{C}$ ($-328 \text{ }^{\circ}\text{F} \dots 1.112 \text{ }^{\circ}\text{F}$)
- **Max. immersion length on request** up to 30.000,00 mm (1.181,10")

Field of application: The robust thermometer is designed for use in demanding and safety relevant applications e.g. in the Chemical, Oil & Gas and Energy industry. The thermometer fulfills the corresponding safety requirements due to various certificates and tests. The use of a

transmitter leads to higher accuracy and reliability in comparison to directly wired sensors.

Features and specifications

Thermometer

Measuring principle

Resistance Temperature Detector

Characteristic / Application

US style
modular temperature assembly
for heavy duty applications
suitable for hazardous areas
threaded process connection
to use with thermowell
backlit display

Thermowell / protection tube

to use with thermowell

Insert / probe

mineral insulated (MI), flexible

Max. immersion length on request

up to 30.000,00 mm
(1.181,10")

Material protection tube/ thermowell

Not defined

Optional coating

Not defined

Thermometer

Process connection

male thread:

G1/2"

NPT1/2"

NPT3/4"

union nut:

NPT1/2"

M24x1.5

Operating temperature range

PT 100:

-200 °C ...600 °C

(-328 °F ...1.112 °F)

Max. process pressure (static)

Depending on thermowell

Accuracy

class A acc. to IEC 60751

class AA acc. to IEC 60751

Response time

depending on configuration

t₅₀ = 3 s

t₉₀ = 7 s

Integration head transmitter

yes (4 ... 20 mA; HART)

Ex - approvals

ATEX II

Explosion proof

Certification

Gost Metrology

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